

ABSTRACT

A file system technique extends the life cycle of limited read/write media. Rewrite cycles of each file and/or each region of the media may be tracked. Different regions of the media are classified as static and dynamic based on their respective number of rewrite cycles. Static files are migrated to the more worn out or dynamic regions of the media, and dynamic files are integrated to the less worn out or static regions of the media. The file system is further sensitized by allocating a new file to an available region after a most recently used region. Where multiple versions of a data region exist, the file system marks a version of the data region as unstable after a certain number of rewrite cycles to the version and directs rewrite cycles to a subsequent version of the data region.

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